

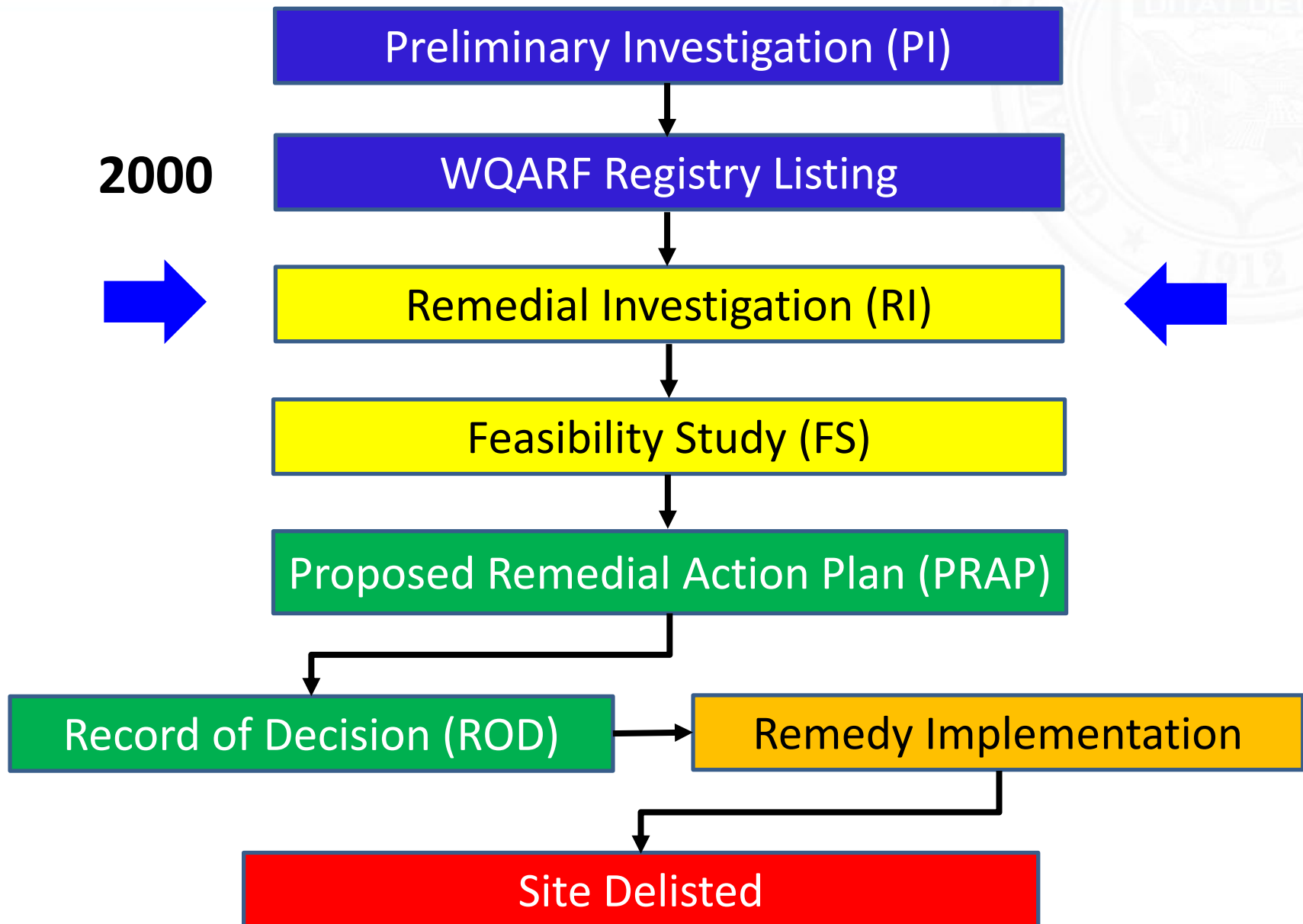
# East Central Phoenix - 40th Street & Osborn Road WQARF Site

Draft Remedial Investigation Report &  
Proposed Remedial Objectives

May 28<sup>th</sup>, 2020

- Water Quality Assurance Revolving Fund (WQARF) Process
- Purpose of Remedial Investigation Phase
- Site Background Information
- Groundwater Results
- Site Conceptual Model
- Proposed Remedial Objectives (ROs)
- Conclusions

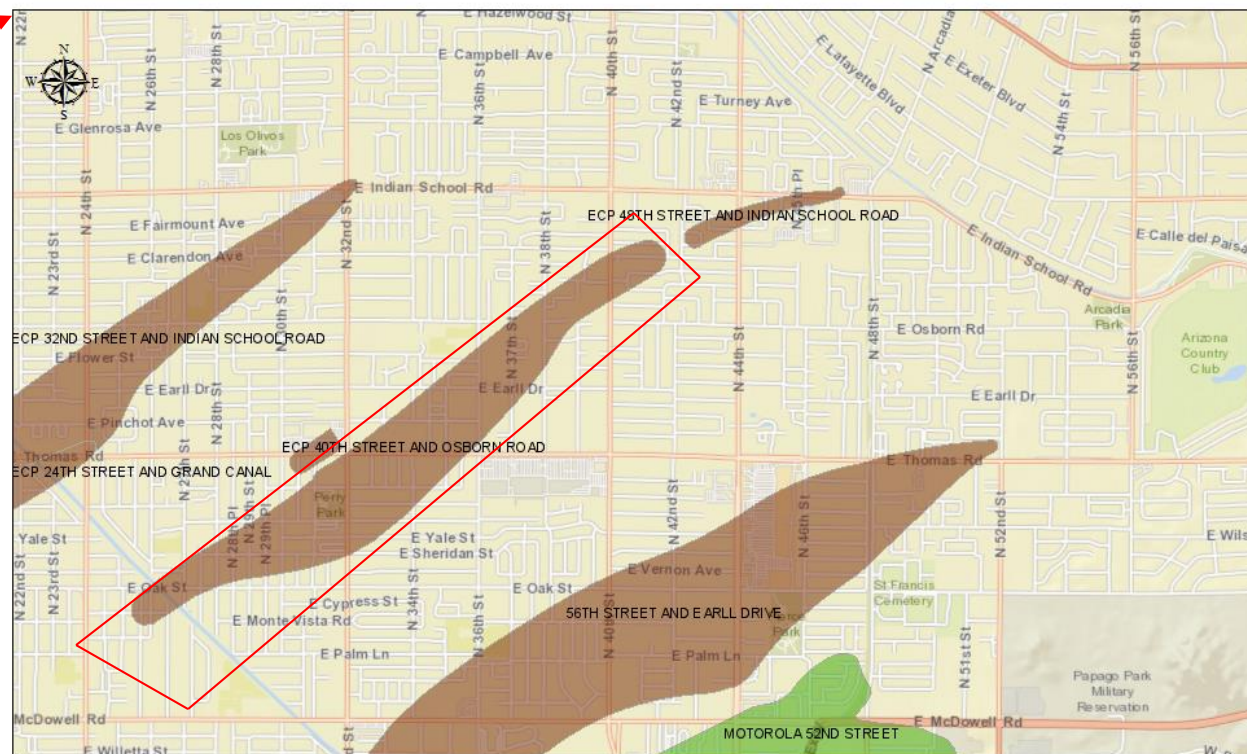
# WQARF Process



- Identify Source of Contamination
- Determine Nature & Extent of Contamination
- Identify Potential Impacts to Public Health & Environment
- Identify Current & Future Land & Water Use at the Site
- Obtain Data for Development of Site Clean-Up Actions

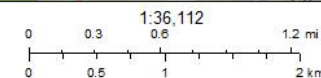
# Site Location

## 40<sup>th</sup> Street and Osborn Road: East Central Phoenix WQARF Site



3/2/2020

- Rivers
- EPA NPL
- Counties
- WQARF
- Superfund
- DOD



The Arizona Department of Environmental Quality has compiled this map as a service to our customers using information from various sources. ADEQ cannot ensure that the information is accurate, current or complete. Neither the information presented nor the maps themselves are official documents.

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community  
ADEQ: Arizona Department of Environmental Quality

- Contaminant of Concern = Tetrachloroethene (PCE)
- Impacted Media = Groundwater
- Source of Contamination
  - Not Identified.

- Geology

- Alluvial sediments – predominately silts and clay, some sand, trace amounts of gravel.

- Hydrogeology

- Upper Alluvial Unit
- Depth to Groundwater = ~40 feet in NE portion  
= ~90 feet in SW portion
- Groundwater Flow Direction = Southwest

- Urban Setting =  
Low Quality Habitat for Native Species

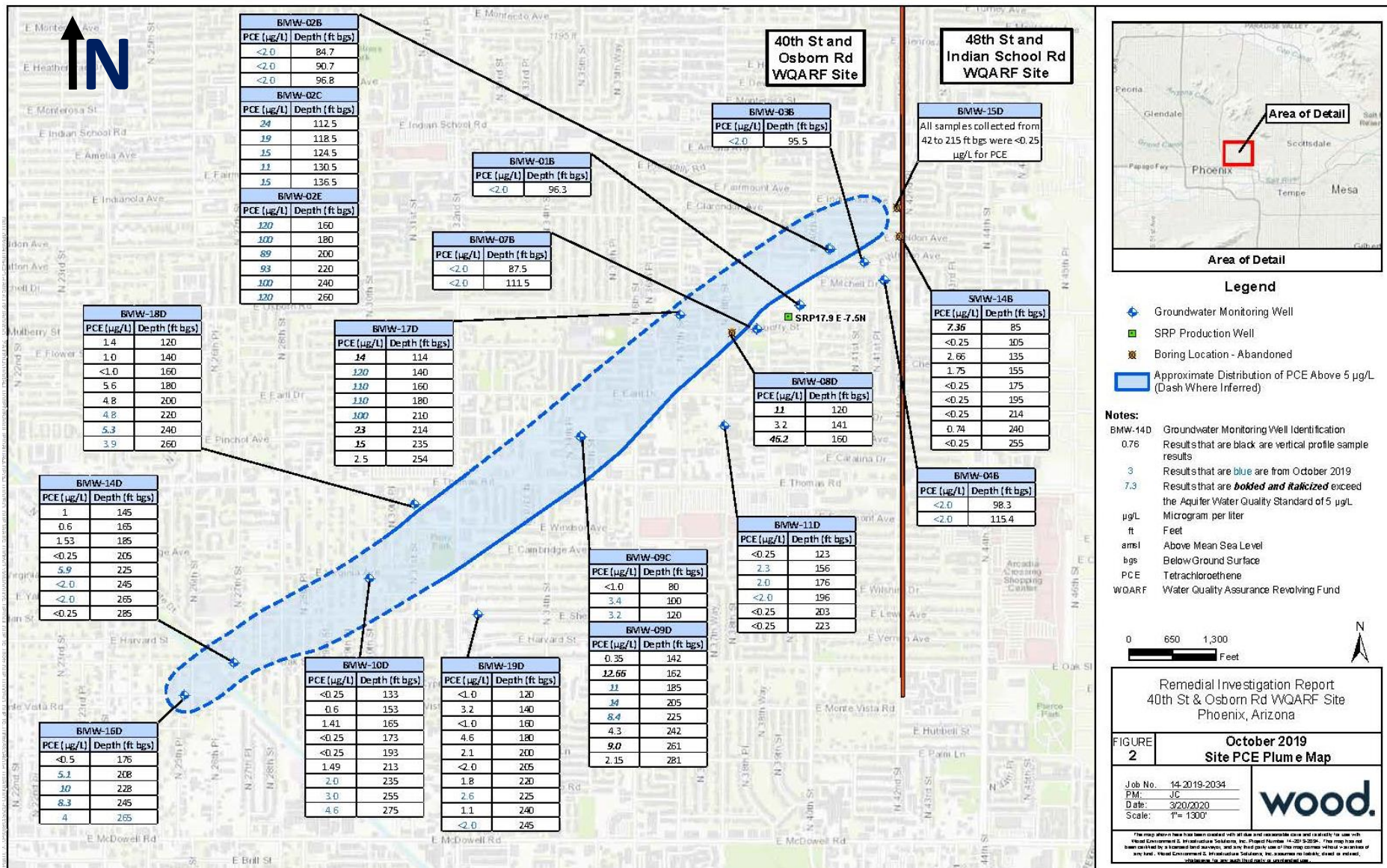
## Listed Endangered Species within Maricopa County

- Seven (7) Listed Species
- Six (6) Fish Species
- Four (4) Flower Species

**Habitat at Site & Site Vicinity**  
**Not Suitable for these Species**



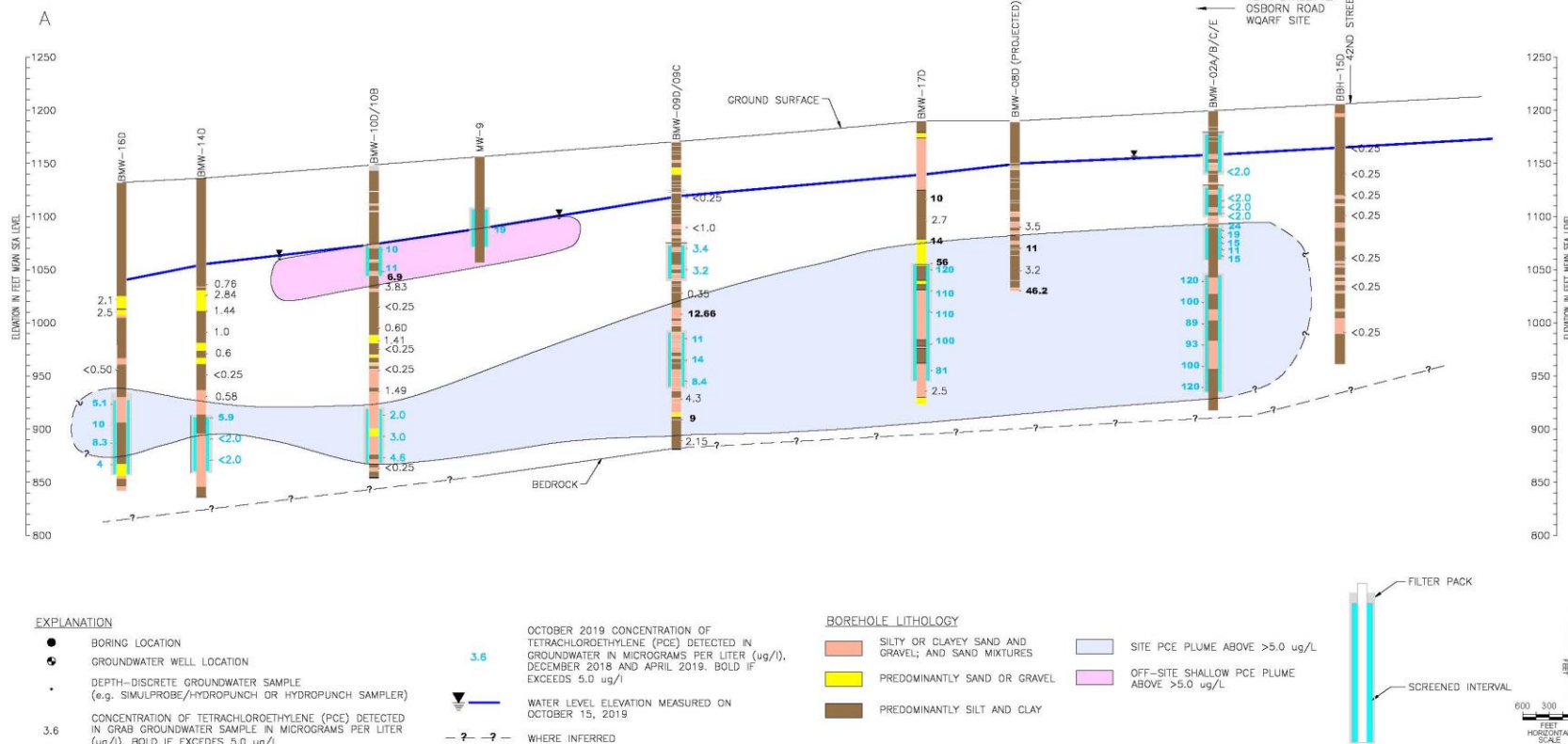
# Groundwater Plume – Oct 2019



# Groundwater Plume Cross-Section



SECTION LOCATION MAP



Environment & Infrastructure Solutions, Inc.  
1401 North 16th Street, Suite 100  
Phoenix, Arizona 85016  
PHONE: 602-333-0000  
FAX: 602-333-0100

**wood.**

Cross - Section A-A'  
Remedial Investigation Report  
40th Street and Osborn Road  
WQARF Site Phoenix, Arizona

DESIGNED BY JC  
DRAWN BY: GRM  
CHECKED BY: JC

PRELIMINARY  
NOT FOR  
CONSTRUCTION  
OR  
RECORDING

PROJECT NO:  
14-2019-2034

DRAWING NAME  
**4**

SHEET NO. 1



- Groundwater Impacted with PCE at Concentrations above the Aquifer Water Quality Standard (5 ppb)
- Maximum PCE Concentration in December 2019 = 120 ppb
- PCE Vertical Distribution:
  - Upgradient NE section – 112.5 to 260 ft bgs\*
  - Downgradient SW section – 208 to 245 ft bgs
- Extent of Groundwater Contamination Laterally & Vertically Defined

\*bgs = below ground surface

- Nature & Extent of Groundwater Contamination Defined
- No Current Health Risk to Receptors
- No Data Gaps.
  - Monitoring wells BMW-20D and BMW-21D installed in April 2020 to define extent of PCE plume to the northwest.
  - BMW-22D installed in April 2020 near where contaminant plume deepens.

## *ADEQ Community Involvement Coordinator*

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602.771.3976

Note: Public Comment Period for Draft Remedial Investigation Ends on **June 01, 2020**

# East Central Phoenix - 40th Street & Osborn Road WQARF Site

Remedial Objective Solicitation

May 28<sup>th</sup>, 2020



# What is a Remedial Objective?

- “Remedial Objective” (as defined in the Arizona Administrative Code [R18-16-401]) means the goal, as established by the “Remedial Investigation Process,” to be achieved by a remedy.
- The “Remedial Objective” is the “Site Clean-Up Goal.”

- The “Remedial Objective Report” (as defined in the Arizona Administrative Code [R18-16-406]) shall state the remedial objectives for each listed land and water use as follows:
  - Protect against loss or impairment of land and water use.
  - Restore, replace, or otherwise provide identified use of land and water.
  - Time frame when action is needed to protect against loss of land and water use.
  - Duration of action needed to protect or provide for land and water use.



- Land Use
  - Combination of Residential & Commercial Use
  - Not Expected to Change Over Next 100 Years
- Water Use
  - Aquifer Source of Drinking & Irrigation Water
  - Not Expected to Change Over Next 100 Years

- A Remedial Objective for Soil is Not Needed
- Why?
  - Areas of impacted soil not identified during remedial investigation.

## Irrigation Water Use

Protect against the loss or impairment of irrigation water threatened by the contaminants of concern at the 40<sup>th</sup> Street and Osborn Road WQARF Site. Where protection cannot be achieved in a reasonable, necessary, or cost-effective manner; restore, replace, or otherwise provide for irrigation water that is lost or impaired by the contaminants of concern at the 40<sup>th</sup> Street and Osborn Road WQARF Site. Action is needed for as long as necessary to ensure that, while the water exists and the resource remains available, the contamination associated with the 40<sup>th</sup> Street and Osborn Road WQARF Site does not prohibit or limit the designated use of groundwater.

## Potable Water Use

Protect against the loss or impairment of potable water threatened by the contaminants of concern at the 40<sup>th</sup> Street and Osborn Road WQARF Site. Where protection cannot be achieved in a reasonable, necessary, or cost-effective manner; restore, replace, or otherwise provide for potable water that is lost or impaired by the contaminants of concern at the 40<sup>th</sup> Street and Osborn Road WQARF Site. Action is needed for as long as necessary to ensure that, while the water exists and the resource remains available, the contamination associated with the 40th Street and Osborn Road WQARF Site does not prohibit or limit the designated use of groundwater.

- A Remedial Objective for Surface Water is Not Needed
- Why?
  - Current Surface Water Use is Irrigation from SRP Canals. Water in the SRP Canals is Supplemented with Groundwater. The Groundwater Remedial Objectives Address the Groundwater Pumped into the Canals from Wells at the Site.

- Verbal Solicitation in Meeting Today.
- State Your Name, Affiliation, and Verbal Comment.



### **30-Day Comment Period that Begins with the Notice of Availability of the Remedial Objectives Report.**

### **How to comment on Proposed Remedial Objectives presented in the Remedial Objectives Report:**

- Email Comments to : [Kowalczyk.Lisa@azdeq.gov](mailto:Kowalczyk.Lisa@azdeq.gov)

- Mail Comments to:

Arizona Department of Environmental Quality  
Waste Programs Division  
Attention: Lisa Kowalczyk  
1110 W. Washington St.  
Phoenix, AZ 85007